

REMARKS/ARGUMENTS

By this amendment, claims 2, 3, 4, and 10 are amended, claim 6 is cancelled, and claim 11 is added. These amendments are made to even more clearly recite the claimed invention, do not add prohibited new matter and are fully supported by the specification.

Reconsideration and withdrawal of the rejections set forth in the outstanding Office Action are respectfully requested in view of the foregoing amendments and the following remarks.

Rejection Under 35 U.S.C. § 103(a)

The Office Action rejects claims 2 and 6-10 under 35 U.S.C. § 103(a) as being unpatentable over Lindhoff (U.S. Patent No. 6,373,888, hereinafter the '888 patent) and Lindhoff et al. (U.S. Patent No. 6,463,107, hereinafter the '107 patent).

Initially, the Examiner asserts that the '888 patent discloses the claimed adjuster, which is "configured to adjust a filter for filtering the received signal using the known signal pattern on a per time unit basis," as recited in the independent claims. The Examiner also asserts that the '888 patent discloses a TMDA system "where processing is on a per time unit basis." Indeed, such a system may *receive* a signal on a per time unit basis. However, the '888 patent, as well as the other cited publications, do not disclose an adjuster that *adjusts* a filter for filtering on a per time unit basis. For this reason alone, the '888 patent fails to disclose all of the element of the claimed invention.

Furthermore, independent claims 2, 3, 4, and 10 recite a "canceller configured to cancel an interference component... the interference component comprising adjacent channel interference and inter-symbol interference." Although the Examiner asserts that the '888 patent

discloses cancelling “adjacent channel [or] inter-symbol interference” (Office Action, page 3), the sections of the ‘888 patent cited by the Examiner only disclose cancelling inter-symbol interference (*see* Lindhoff, col. 1, lines 16-27 and col. 4, lines 28-33). There is no mention of cancelling adjacent channel interference in either the ‘888 patent or the ‘107 patent.

Accordingly, at least for each of the reasons discussed above, Applicant respectfully submits that ‘888 patent and the ‘107 patent, even if combined, do not disclose all of the elements of the claimed invention, and respectfully requests withdrawal of the rejection over the ‘888 patent and the ‘107 patent.

The Office Action also rejects claim 3 under 35 U.S.C. § 103(a) as being unpatentable over Lindhoff and Lindhoff et al. in view of Jayaraman et al. (U.S. Patent Application Publication No. 2003/0087622, hereinafter “JAYARAMAN”). Furthermore, the Office Action rejects claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Lindhoff and Lindhoff et al. in view of Casas et al. (U.S. Patent No. 7,027,500, hereinafter “CASAS”). Lastly, the Office Action rejects claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Lindhoff and Lindhoff et al. in view of Perets et al. (U.S. Patent Application Publication No. 2003/0003889, hereinafter “PERETS”).

In view of the remarks above, Applicant submits that Lindhoff (the ‘888 patent) and Lindhoff et al. (the ‘107 patent) do not disclose all of the recited features of the claimed invention, and JAYARAMAN, CASAS, and PERETS fail to cure these defects. JAYARAMAN, CASAS, and PERETS do not teach “an adjuster configured to adjust a filter for filtering the received signal using the known signal pattern on a per time unit basis” or a “canceller configured to cancel an interference component...the interference component comprising adjacent channel interference and inter-symbol interference,” as required by the claims.

Accordingly, the combination of cited publications do not teach all of the elements recited in independent claims 2, 3, 4, and 10.

Furthermore, Applicant submits that it is improper to combine the '888 patent and the '107 patent with JAYARAMAN. The Examiner asserts that JAYARAMAN discloses "using detected adjacent channel interference result to set [the] filter" (Office Action, page 5). However, the tap coefficient controller, recited in claim 3, controls tap coefficients based on *both* the determined modulation scheme and a detection result of adjacent channel interference. Neither JAYARAMAN nor any of the other cited publications disclose how a tap coefficient controller may resolve and control tap coefficients using these two sources of data, i.e., the determined modulation scheme and the adjacent channel interference. Accordingly, Applicant submits that the cited publications do not render claim 3 obvious because the cited publications have been improperly combined, and request withdrawal of this rejection.

Lastly, Applicant notes that CASAS does not disclose "a tap coefficient controller configured to control tap coefficients to set the filter based on the measured error and a reception level of the received signal," as recited in claim 4. Although the Examiner asserts that CASAS discloses this claim element, CASAS generally describes "adjusting filter parameters...by subsequent error-correction decoding" and "filter coefficients" (*see* CASAS, col. 3, lines 44-49). However, in the section cited by the Examiner (*see* Figure 1, col. 2, line 53 - col. 4, line 21), CASAS does not teach or suggest controlling "tap coefficients to set the filter based on the measured error *and a reception level of the received signal*," as recited in claim 4. Accordingly, Applicant submits that CASAS fails to disclose all of the elements of the claimed invention, and requests withdrawal of this rejection.

In view of the foregoing, Applicant respectfully submits that any proper combination of JAYARAMAN, CASAS, and PERETS, fails to establish a *prima facie* case of obviousness.

Applicant respectfully requests withdrawal of the rejections for obviousness over Lindhoff and Lindhoff et al. in view of JAYARAMAN, CASAS, or PERETS.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections, and an indication of the allowability of all claims pending in the present application in due course.

SUMMARY AND CONCLUSION

For the foregoing reasons, it is believed that all of the claims in this application are in condition for allowance, which action is respectfully requested.

If any extension of time is deemed to be necessary to maintain the pendency of the application, including any extension of time fees for entry of an Examiner's Amendment, the Patent and Trademark Office is hereby requested and authorization is hereby provided to charge any necessary fees to maintain the pendency of this application to Deposit Account No. 19-0089.

If the Examiner has any questions, or wishes to discuss this matter, the Examiner is respectfully invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
Hiromi MATSUSAKA



Bruce H. Bernstein  
Reg. No. 29,027

William Pieprz  
Reg. No. 33,630

September 24, 2007  
GREENBLUM & BERNSTEIN, P.L.C.  
1950 Roland Clarke Place  
Reston, VA 20191  
(703) 716-1191